DOT officials urge patience behind plows this winter

By SHAWNE K. WICKHAM - New Hampshire Sunday News

Ever get behind a line of snowplows when you're hurrying to get somewhere? It can be pretty aggravating. Folks at the state Department of Transportation say they understand the frustration. Still, they say, the safest place to be in a snowstorm is behind a plow.

Caleb Dobbins, state maintenance engineer at the DOT, ticks off the top three complaints he hears every winter: "Why do I get stuck behind a plow truck all the time? Why did you take my mailbox out? And how come as soon as I finished plowing my driveway, you came and filled it in afterwards?" Dobbins has an answer for the first - and by far most common - complaint. "The safest place for you to be is behind a plow truck," he said.

"Because the roadway conditions in front of a plow truck are completely unknown. We're treating it, we're plowing it, we're giving you the best condition that we possibly can. It may not be at the speed you want to travel, but it is winter."

As for "tandem plowing" - that's when a row of snowplows travels down the highway together - the DOT says it avoids creating a dangerous ridge of snow that otherwise piles up at the edge of a plowed lane. A typical plow truck pushing an inch of snow off 14 feet of roadway creates a 14-inch-high ridge, Dobbins said.

"That's one of the main reasons that we do tandem plowing is to clear the entire road and not create that snowbank in the middle of the road that's going to be a hazard to folks," explained Bill Janelle, director of operations for DOT.

If you're driving behind a row of plows, your trip will take longer, Janelle said, but the alternative could be far worse. "You pass the plow, and as we often see, folks may spin out, get into an accident. And that could close the entire road for hours."

Plow drivers don't have the same visibility that other drivers have, Janelle said, in part because of the "snow clouds" a plow puts up. DOT officials say many people misunderstand what the state plowing crews are trying to accomplish in a storm.

"They typically expect from the time they leave their driveway to the time they get to wherever they're going, all the roads should be the same," Dobbins said.

But the reality is that the DOT has a winter maintenance policy that governs how often state roads are plowed, based on traffic volume. For instance, a major highway such as Interstate 93 will be plowed every 90 minutes when snow falls at a rate of an inch an hour. A smaller, less-traveled road will be plowed about half that frequently.

And Dobbins noted that if it's not snowing that hard, the plows will come even less frequently. It's a matter of resources, he said. "Every time a truck rolls out, it's getting 5 miles to the gallon at best. So you're looking at almost a dollar a mile just for the cost of gas for our trucks," he said.

State crews and the contractors they supervise are responsible for plowing 4,000 miles of roadways each winter, Janelle said. "When it snows, we can make a pass on every one of those roads within ... on average three hours," he said. Still, he said, "Snow will be on the road during a storm, there's no question about that.

"It's still passable, but you're not going to be able to drive on it the same way you drive on a bare road. You need to slow down, you need to leave more room in front of folks, and you need to plan ahead."

The DOT relies on crews working out of 92 patrol sheds across the state to keep the roads passable, Dobbins said.

"Every one of those sheds has trucks that are situated there with people that live (nearby) there," Janelle said. "So when it starts to snow ... they know the route, they know every turn and curve in that plow beat that they're responsible for."

Sgt. Matthew Shapiro of the New Hampshire State Police said his agency works closely with the DOT during storms. Additional cruisers are positioned on the roads, he said, both to slow down drivers and to decrease response time when accidents do happen. It's an "all hands on deck" approach, he said. "Troop commanders, headquarters staff, even the colonel himself will often work during a storm in this capacity."

And that means more troopers reporting adverse road conditions to the DOT, Shapiro said. Those reports help officials decide what to post on those electronic message boards drivers see on major roadways.

There are three types of messages posted, he said: weather advisories, designed to warn drivers of upcoming storms one commute ahead of time; advisory speed limits, set by the DOT to indicate real-time conditions; and localized warnings about road conditions.

This is also where the DOT's "night riders" come in. Construction foremen during the summer, these folks patrol their local roads in pickup trucks with sanders during the overnight hours. "They know their territory, so they know their problem spots," said Denise Markow, program manager at the DOT's Transportation Management Center in Concord. "They are invaluable."

So what happens this winter in those narrow construction zones, such as on I-93 in Windham and Hooksett, or on Route 101 in Candia?

Dobbins said plow trucks will try whenever possible to cast the snow up over the barriers in construction zones. In some cases, contractors may have to bring in loaders to clear snow where the lanes are too narrow to accommodate it. That's what happens now in the open-road-tolling lanes on I-95 in Hampton, where those lanes have barriers and two-foot shoulders on both sides, Dobbins said. "When the storm is over, during the off hours, they come back and clear the snow away."

Budget cuts meant reducing some summer maintenance projects to preserve the DOT's winter maintenance plan, Janelle said. "Because really, this is one of the top priorities that we do, keeping roads passable in winter," he said. "It's important for safety; it's important for the economy."

Based on economic impact studies done in other states, Dobbins estimates that closing highways here because of a snow emergency could cost the state between \$50 million and \$70 million a day. "When you think we only spend about \$40 million a year on snow and ice removal, it's a pretty good payback," Dobbins said.

DOT advice: Don't rush into trouble in winter driving

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The website for the New Hampshire Department of Transportation features user-friendly tools to help minimize the frustrations of winter driving. Look for the logo "Winter Driving in New Hampshire" on www.nhdot.com.

To start, you can look at a statewide map that shows how often certain types of roads are plowed when snow is falling at a given rate, a policy that's based on traffic volume.

You can also sign up for Twitter alerts to your cell phone for when there's an accident or other highway problems on your commuting route. And you can check traffic cameras positioned on major roadways to see whether there's traffic congestion, snow-covered roads or a crash.

These tools can make the roads safer for everyone, according to Sgt. Matthew Shapiro of New Hampshire State Police operations.

"The vast majority of winter storm accidents are caused by driving too fast for the conditions present, so the Number 1 thing somebody can do is plan ahead," he said. "The more you plan ahead, the less likely you are to drive too fast, to drive in too close proximity to the car ahead of you, or to be passing plows when you shouldn't be."

The website also features safe driving tips for wintry conditions. Here's a sampling:

- -- Slow down in wet, snowy, or icy conditions; or when visibility is poor; or when conditions are changing or unpredictable.
- -- Slow down when approaching intersections, off-ramps, bridges or shady spots. All of these are places where conditions can be right for the formation of "black" ice a thin, hard-to-see coating of clear ice on paved surfaces.

- -- Allow additional space between vehicles because winter road conditions require longer stopping distances.
- -- Avoid using cruise control.
- -- If you have anti-lock brakes, press the pedal down firmly and hold it. If you don't, gently pump the pedal. Either way, give yourself plenty of room to stop.
- -- Four-wheel drive might get you going faster, but it won't help you stop sooner.
- -- Accelerate gradually, avoid abrupt steering maneuvers and merge slowly to keep your vehicle from sliding.
- -- Don't crowd snowplows. The front plow extends several feet in front of the truck and may cross the center line and shoulders during plowing.
- -- If you find yourself behind a plow, stay behind it or use caution when passing. Plows can throw up a cloud of snow that can cut visibility to zero.
- -- A snowplow operator's field of vision is restricted. You may see them, but they may not see you.
- -- Before leaving home, find out about driving conditions. Make sure you've cleared snow from your vehicle's windows and lights, including brake lights and turn signals. And give yourself extra time to reach your destination safely.
- -- Wear your seat belt; 71 percent of all traffic fatalities in New Hampshire in the past 10 years involved people who were not wearing seat belts.

Winter highway maintenance by the numbers

\$65: Average per ton cost of rock salt used on New Hampshire state roadways.

92: Number of patrol crews working for the state Department of Transportation.

310: State trucks plowing the roads

430: Contracted plows DOT hires and supervises for winter maintenance and snow removal.

9,122: The "lane miles" maintained and plowed each winter (a "lane mile" equals one mile of one lane of travel on a highway).

45,830: Average cubic yards of sand used per winter.

169,014: Average tons of salt used per year.

\$587,227: Cost of winter snow removal on state highways for a typical 8-hour storm with 2 salt applications. (Includes all state equipment, hired equipment, labor charges, fuel, salt and sand.)

4 billion: Cubic feet of snow NHDOT plows on state roads each year (based on an average snowfall accumulation of 66 inches in the Concord area). That amount of snow laid out in a 1-foot-by-1-foot cross section, would circle the earth 30 times